TRANSACTIONS OF THE PHILADELPHIA ACADEMY OF SURGERY.

Stated Meeting, May 7, 1894.

DR. J. EWING MEARS in the Chair.

PERSONAL EXPERIENCE IN THE TREATMENT OF STRANGULATED HERNIA.

DR. JOHN ASHHURST, JR., stated that of nineteen operations for strangulated hernia performed by him, fourteen were for inguinal hernia. One of these cases was in a child operated on at one of his clinics, and at once removed by the parents, and the further history is unknown. Of the other thirteen patients, ten recovered and three died. The deaths occurred in cases where a fatal termination might have been expected, and were not due to the operation. In one case the hernia had been strangulated for five days, and the patient was a pronounced diabetic. He died of gangrene after the operation, dependent upon the diathetic condition and upon the prolonged strangulation. The second death occurred in a woman of seventy-eight years. The strangulation was very tight, and the bowel was gangrenous at the time of operation. Rupture occurred at the sulcus corresponding to the line of constriction, and death took place from exhaustion in the following twenty-four hours. The third death occurred in a man of intemperate habits, who had a hernia strangulated for thirty hours, and who had been subjected to forcible taxis before admission to the hospital. So forcible had been the taxis that it had resulted in rupture of the bowel in two places. At the operation the scrotum was found enormously swollen and black from effused blood. Twelve inches of the bowel were gangrenous, and the gut presented two openings. A circular enterorrhaphy was done, but the patient died thirty-two hours afterwards from cardiac failure, without evidences of peritonitis.

Four operations were for strangulated femoral hernia, with three

recoveries and one death. In the fatal case the patient died in a collapsed condition thirty-six hours after the operation. There was no evidence of peritonitis.

One case of strangulated umbilical hernia terminated fatally. The patient was eighty years of age, and the strangulation had existed for a number of hours. The patient died of peritonitis.

The youngest patient operated on was a child two years of age, with inguinal hernia. This case ended in recovery. The oldest patient was the woman eighty years old, with umbilical hernia, just referred to.

In one case the hernia after coming down through the inguinal canal did not pass into the scrotum, but turned up in the line of Poupart's ligament, and passed outward along the groin. It was complicated with an undescended testicle. In this case the hernia had been down six days when operated upon. The reporter was able by taxis to reduce a portion of the tumor, but finding that there still remained a hard mass which could not be reduced, he opened the sac and found that the hard lump was the testicle in a gangrenous state, either from a twist in the cord or, as seemed more probable, from the taxis which had been practised rather violently before the patient's admission to the hospital. The testicle was excised, and the patient recovered.

Two cases of irreducible omental hernia were operated upon. In these cases a tumor had been present in the tunica vaginalis for a long time, and while there were no symptoms of strangulation, the weight and bulk of the tumor gave great annoyance, and the patients were exposed to the risk of a portion of the gut coming down at any time. In these cases, most of the omentum was cut away after securing its neck between two ligatures.

While he had reduced a good many strangulated hernias by taxis, and agreed that it should be the surgeon's first thought, and while, if practised with care and skill, it is a safe method, and one which will usually succeed when resorted to in time, yet he believed that in the hands of an inexperienced practitioner, who sees but few cases of hernia, taxis is an unsafe procedure. Under such circumstances, he thought that the patient would sometimes be safer with the operation of herniotomy than with taxis, for herniotomy is not a very difficult operation, and not very dangerous if performed with caution, whereas taxis, while seeming to be very simple, yet if employed with great persistence and force may lead to the most serious consequences. His own cases of herniotomy which resulted fatally

had been mostly subjected to prolonged taxis. Taxis, therefore, has its limitations, and should be resorted to with great gentleness and with great caution, except in the hands of those surgeons who are sufficiently familiar with the anatomy and treatment of strangulated hernia to feel that they may use the method more freely and more systematically.

DR. JOHN B. DEAVER asked the experience of the Fellows with reference to anastomosis. He believed that anastomosis operations are of value in but few cases of strangulated hernia. He had tried the method more by way of experiment, but the cases had not recovered. In order to do this operation it is necessary to pull down additional bowel. In gangrenous hernia it is better to allow the bowel to remain in the wound or, as he preferred, to cut it away. In hernia the condition of the patient does not warrant the procedure of anastomosis, and even under the most favorable circumstances the operation is anything but satisfactory.

DR. J. M. BARTON remarked that he had not spent much time with taxis. He had so often found the bowel in such a doubtful state, even after short strangulation, that he feels much safer, if there is any question as to its condition, to operate at once. In one case the bowel was entirely gangrenous eighteen hours after the violence that produced the strangulation.

As to the advisability of making lateral anastomosis immediately after removing gangrenous bowel, the condition of the patient rarely warrants any prolonged operation, and he thought that the rule now is, in intestinal obstruction, irrespective of cause, to do nothing further than establish an artificial anus at the first operation.

DR. O. H. ALLIS said that of three cases of strangulated umbilical hernia upon which he had operated, all recovered. He thought the operation in umbilical hernia to be no more dangerous than in femoral or inguinal hernia. Where the constriction has been prolonged, probably any form of hernia means death. From what he had seen of umbilical hernia, he maintained that if it is a favorable case it is as likely to get well as a case of femoral or inguinal hernia.

DR. H. R. WHARTON thought that the most difficult point to decide in the treatment of strangulated hernia is the question whether or not to put the bowel back when it shows the marked effect of strangulation. In many cases where there is not absolute sloughing, it is hard to decide whether or not a bowel whose nutrition is much impaired will recover. Within the past ten days he had had a case

of femoral hernia where the color of the bowel was very unfavorable. After dividing the stricture he noticed some improvement in the color of the bowel, and put it back with some misgivings. The patient progressed satisfactorily without rise in temperature.

DR. RICHARD H. HARTE had seen two cases of Littre's hernia. One was brought to St. Mary's Hospital after prolonged taxis, and the hernia was supposed to have been reduced. The symptoms did not subside, and when he saw the case the man was dying. At the autopsy it was found that a small portion of the bowel had been caught and was strangulated. The second case was seen at the Episcopal Hospital. In this case, too, operation revealed a small portion of the bowel which was caught and strangulated. These cases are apt to be overlooked until rather late symptoms of strangulation make their appearance.

DR. J. M. BARTON said that he had had six cases of umbilical hernia, and had had the misfortune to lose two. In these cases, the strangulated bowel is invariably in the centre of a mass of omentum. The small knuckle of intestine is at the very base, and any pressure on the surface would be utterly useless. In a case of this kind, seen some time ago, he grasped the abdomen above and below the hernia and lifted the abdominal walls, actually raising the patient from the bed. At the second attempt this proved successful. He had employed the same method in another case with success.

DR. JAMES COLLINS said that the youngest case on which he had operated was a child two years old. It got well. His oldest case was eighty-two years old. He emphasized the necessity of opening the sac. In one case where he opened the sac, he found, on drawing down the bowel, another band about the intestine. He had seen the same thing in other cases.

DR. WILLIAM G. PORTER emphasized the point made by Dr. Collins as to the necessity of drawing down the bowel. He had seen two cases where the bowel in the sac was carefully examined and found all right and returned, and was immediately followed by a gush of liquid fæces. His explanation of these cases is that the strangulated portion had returned and a healthy portion of the bowel had come down.

DR. SAMUEL ASHHURST had seen a case like those referred to by Dr. Harte, and this prejudiced him against the operation without opening the sac. Taxis was employed and the tumor was reduced, but the symptoms did not disappear. The patient died,

and at the post-mortem there was found a small portion of bowel still retained within the internal ring, not involving the whole lumen.

DR. THOMAS R. NEILSON had had two cases of Littre's hernia or partial strangulation of the bowel. One was in an elderly woman brought to the hospital after five days of the so-called obstruction of the bowel. The patient was practically moribund, but at the earnest solicitation of the patient he operated. The constriction was found at the internal abdominal ring, involving only a portion of the gut. The patient died shortly after the operation. The second case was in a young man with left inguinal hernia. The patient presented a tumor not larger than a large marble, exceedingly tender, with pain at the umbilicus and a tendency to nausea. He operated and found a Littre hernia of the small intestine, and the patient recovered. The possibility of the occurrence of this hernia should not be overlooked.

DR. J. EWING MEARS reported one case of umbilical hernia in which strangulation had existed for forty-eight hours and general peritonitis had supervened. He operated and made an artificial anus, but the patient died within twelve hours.

DR. JOHN ASHHURST, JR., endorsed the statement that in the majority of cases of gangrenous hernia it is not proper to make an anastomosis of the bowel at the time of the herniotomy. Whether we should open the gut or resect a portion of it should be decided by the extent of the gangrene. If there is only a patch, it is sufficient to open the bowel; if a large portion is gangrenous, it is probably safer to remove it. In the majority of cases it is proper only to establish a false anus, which may be subsequently dealt with. The only exception is where the surgeon has reason to fear that the portion of bowel involved is high up in the small intestine, when so much of the bowel would be cut off from exercising its digestive function that the patient would die of inanition, even if he should survive the immediate results of the operation. Under such circumstances, if the patient is in a condition to justify further interference, it would be better to complete the operation by uniting the bowel according to one of the methods suggested. In the case in which he removed twelve inches of the bowel and united the ends by circular enterorrhaphy, no extravasation occurred, and the patient's death did not appear to be due to the operation.

THE TREATMENT OF CONTUSIONS AND SPRAINS OF THE BACK.

DR. HENRY R. WHARTON reported a series of nine cases of severe contusion and sprain of the back, the lumbar-dorsal region being the part most frequently injured. As regards the treatment of contusions and sprains of the back, he considered that rest in bed is a matter of the first importance, and, in addition, he had found that the pain and general discomfort of the patient is much diminished, and the time of treatment much shortened by having the back firmly strapped as soon as the patient came under observation. The strapping of the back is effected by taking strips of resin-adhesive or of rubber-adhesive plaster, 2½ inches in width, and long enough to extend half way around the body; these are applied so as to cover in the back, one strap slightly overlapping the other, from a point just below the junction of the last lumbar vertebra with the sacrum to the lower ribs. These straps were often removed at the end of two or three days, and the back was restrapped if the pain and tenderness still persisted. The straps were usually allowed to remain in place until the patient was up and about without complaining of pain or discomfort in the region of the injury. In cases of severe contusion the straps often require renewal a number of times.

This method of treatment of contusions of the back was first called to his notice by Professor Ashhurst while serving as resident physician in his wards at the University Hospital, and since he had employed it he had entirely discarded the use of fomentations and stimulating lotions, which are generally recommended in the treatment of these injuries.

After the subsidence of the acute symptoms of these injuries massage is valuable, but in the early stages strapping will be found the most satisfactory. The application of straps employed as above described is usually promptly followed by relief of pain, and the fixation produced allows the patient to move with more comfort, and the time required for the recovery of the injured parts is much shortened.